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EXAMINER	
JEANTY, ROMAIN	

ART UNIT	PAPER NUMBER
3623	

NOTIFICATION DATE	DELIVERY MODE
10/10/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

**Application No.**

09/747,645

**Applicant(s)**

GUPTA ET AL.

**Examiner**

Romain Jeanty

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Final Office action is in response to the communication received on July 18, 2007.

Claims 1-27 are pending in the application.

### **Response to Arguments**

2. Applicant's arguments filed on July 18, 2007 have been fully considered but they are not persuasive.

### **Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 4-6, 11-15, 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deleryd, Mats; "On the Gap between theory and practice of process capability studies", 1998, The International Journal of Quality and Reliability Management, Bradford, Vol. 15, Iss. 2 pg. 178, (hereinafter Deleryd) in view of "A SAS Institute White Paper: The Quality Data Warehouse – serving the analytical needs of the manufacturing enterprise", © 1999, SAS Institute, pp.1-11. (hereinafter SAS)

Regarding Claim 1, Deleryd teaches:

subtracting the customer requested date from the max ship date producing a difference value;

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Page 4 paragraph 4, the process metric is subtracted from the target value T to produce a difference value (the examiner notes that “customer request date” and “max ship date” are considered non-functional descriptive material and do not further distinguish the claim.

determining a statistical calculation to indicate process quality using the shipment quality metric.

Page 4 paragraph 5,  $C_{pk}$  is a statistical calculation to indicate process quality ( $C_{pk}$  is a Process Capability metric). Also see page 3 para 6, process metrics can also be placed on control charts (i.e. x-bar and R charts) to indicate process quality – these charts also use a statistical calculation to indicate process quality.

Deleryd further teaches that standard six-sigma techniques assume that a process produces variation that is normally distributed, but that in reality most real-world processes produce results that are skewed (page 5 para 2 & 4).

Deleryd does not teach:

maintaining a database that contains fields indicating at least an order, a max ship date, a customer requested date, and a product category for each order;

fetching order information for all orders that have a valid max ship date;

adding a predetermined number of days to the difference value providing a shipment quality metric for each order; and

However, official Notice is taken that it is old and well known in the art to add a numerical offset to a process metric to handle skewness (i.e. adding a predetermined number of days to the difference value).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Deleryd, regarding providing process control measurement to data that is normally distributed, to add an offset to the data, because it would provide a better process model by taking into account skewness in the data.

SAS teaches:

maintaining a database that contains fields indicating at least an order, a max ship date, a customer requested date, and a product category for each order;

page 3 column 1 para 2, data is collected (i.e. in a database – see Figure 2 on page 4) from transactional systems (i.e. including ERP systems that track sales orders).

Page 4 column 2 para 2, DataMarts/InfoMarts (i.e. databases) are maintained where the data is maintained in a consistent format (i.e. the datamart/infomart records contain fields. – see also page 5 column 1 para 2, the data format of the data mart and info mart is interpreted by the examiner to contain fields, since both a data mart and an info mart are databases).

The examiner notes that the specific field names are considered non-functional data and do not add patentable weight to the claim.

fetching order information for all orders that have a valid max ship date;

page 5 column 1 para 2, a datamart / infomart provides for accessing information that was obtained from a transactional system (i.e. an ERP system). Since SAS teaches populating a info/data mart with ERP data, the retrieval of data for the analysis taught by SAS meets the claim limitation, because ERP data includes order and shipping information (see page 8 column 1 para 4 & page 2 column 2 para 2, shipment records are obtained.)

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SAS teaches using statistical process control and analysis, thus SAS' teachings are analogous art to Deleryd.

SAS teaches that its data warehousing approach to storing data provides for a way to implement quality improvements across an enterprise because data is collected from disparate sources (page 1 column 2 para 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Deleryd, regarding applying six-sigma techniques to measuring process control, to include the database teachings of SAS, because it would enable six-sigma process control to applied across the enterprise.

The examiner notes above that the data above "an order, a max ship date, a customer requested date, and a product category" are nonfunctional data. Deleryd teaches analyzing process data as discussed above but not the data recited. However, these differences are only found in the non-functional descriptive material and are not functionally involved in the steps recited nor do they alter the recited structural elements; therefore, such differences do not effectively serve to patentably distinguish the claimed invention over the prior art. The recited method steps would be performed the same regardless of the specific data. Further, the structural elements remain the same regardless of the specific data. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability as the claimed invention fails to present a new and unobvious functional relationship between the descriptive material and the substrate, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994) ); *In re Ngai*, 367 F.3d 1336, 1336, 70 USPQ2d 1862, 1863-64 (Fed. Cir. 2004); MPEP § 2106.

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Regarding Claim 2, Deleryd teaches:

wherein the order information fetched is only for those orders that were placed within a given time period.

Page 3 para 8, data is gathered based on a given time period (i.e. a particular shift). The examiner notes that the term “orders” is non-functional descriptive material and does not add further patentable weight to the Claim.

Deleryd does not teach obtaining data from a database, however, as noted above, SAS teaches using a database to gather process information.

Deleryd and SAS are both addressing the use of data to improve quality via statistical methods, thus both Deleryd and SAS are analogous art.

SAS teaches that providing data from a database enables immediate analysis of the data, since it is in a format ready for analysis (page 8 column 1 para 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Deleryd, regarding obtaining data within a particular time period, to include the steps of obtaining the data from a database, as taught by SAS, because it would make the data analysis easier and more readily available, since the data is obtained from a database.

Regarding Claim 4, Deleryd teaches:

setting a value for at least one specification limit; and computing and displaying a statistical score based upon the specification limit and the shipment quality metrics, wherein said statistical score is a measure of process capability.

Page 4 para 4, a process capability index is given that is based on a computation of USL and LSL (i.e. specification limits). This process capability index is a measure of process capability because the process is assumed to be capable if this figure is greater than 1.33.

Regarding Claim 5, Deleryd teaches:

wherein the steps following maintaining the database are repeated at regular time intervals.

Page 3 para 8, the process capability study is performed over a longer period of time (i.e. repeated at regular time intervals).

Regarding Claim 6, Deleryd teaches

wherein the statistical calculation is calculated and displayed for each product category.

Page 3 para 8, the statistical calculation is calculated for "homogenous set of data" i.e. from the same category. The examiner notes that the term 'product' is non-functional descriptive material.

Claims 11- 15 and 17-19 recite similar limitations as those recited in Claims 1, 2, 4-6 above, and are therefore rejected under the same rationale

5. Claims 3, 7, 9, 20-22, 24, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deleryd in view SAS and further in view of Davis, Robert D; et al.; "Detecting Process Shifts with X-bar charts", First Quarter 1993, Production and Inventory Management Journal, 34, 1, ABI/INFORM Global, p.25 (hereinafter Davis)

Regarding Claim 3, Deleryd teaches:

determining a value for an upper specification limit and a lower specification limit;

page 4 para 4, USL and LSL are defined as upper and lower specification limits.



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Deleryd further teaches on page 4, para 4, the use of USL and LSL in combination with process sigma to measure dispersion, however Deleryd and SAS do not teach the use of a Z statistic to determine the percentage of nonconforming material as per:

displaying a percentage of times the shipment quality metric was greater than the upper specification limit; and displaying a percentage of times the shipment quality metric was less than the lower specification limit.

Davis teaches:

displaying a percentage of times the shipment quality metric was greater than the upper specification limit; and displaying a percentage of times the shipment quality metric was less than the lower specification limit.

Page 27 step 4, the calculation of a Z statistic determines the percentage of times (including for a million opportunities – note that Davis teaches PPM defects – see page that a quality metric is greater than a USL – the approach is the same as taught by Davis for using a Z-stat to determine the percentage of nonconforming product greater than a LSL – The percentage of product greater and lower than an USL and LSL are displayed by the graphs on page 26 Figure 1.

Davis, Deleryd and SAS all address using statistical methods to improve process quality, thus they are all analogous art.

Davis teaches that using the LSL and USL provide for showing when a process is producing material that is nonconforming by applying statistical principles that illustrate a normally distributed process (page 25 column 2 para 2, i.e. the statistical power in the X-bar chart).

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One of ordinary skill in the art of six-sigma principles would have been motivated at the time of the invention to modify the collective teachings of Deleryd and SAS, regarding providing for a database that provides for process measurement and control using statistical principles, to calculate the percentage of nonconforming product using a Z-statistic, as taught by Davis, because it would provide a proven way to estimate nonconforming material based on the process capability.

Regarding Claim 7, Deleryd teaches using USL and LSL to determine process capability, however Deleryd and SAS do not teach using Z scores as per:

wherein the statistical score is calculated by using a formula given by:  $Z_{LT} = \min [(USL - \mu)/\sigma, (\mu - LSL)/\sigma]$ ,

However, this teaching is shown by an obvious modification of Davis.

Davis teaches using a Z statistic to determine process capability where the difference between the specification limit (i.e. LSL and USL) and the process sample average (i.e.  $\mu$ ) is divided by the standard deviation (i.e.  $\sigma$ ) – Note step 5 on page 27 with the accompanying formula.

It would have been obvious to one of ordinary skill in the art to modify the collective teachings of Deleryd and SAS, to include the Z stat teachings of Davis, because these provide a way to predict process capability.

Davis further teaches that a process may shift its center point so that the bulk of the process observations are not centered exactly between the USL and LSL but are shifted (note Figure 1, b and d). Davis notes that this shift can occur both based on a change in  $\sigma$  (process variation) and a change in  $\mu$  (process average). Since Davis teaches that process shifts can drive

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the tail of the distribution over either the LSL or USL and that the Z statistic measures the percentage of nonconforming material, it would be obvious to take the minimum Z stat of either the USL or LSL, because it is old and well known in the art of six-sigma that a smaller Z stat means that more defective product is being produced.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the collective teachings of Deleryd, SAS and Davis, to take a Z stat as being the minimum Z stat for the USL or LSL, because it would show which direction the process was moving with regards to the USL or LSL.

Regarding Claim 9, Deleryd, SAS and Davis do not teach:

wherein the method further comprises displaying said  $Z_{LT}$  value by displaying a scale representing a range of values for  $Z_{LT}$  with an overlapping needle to indicate current performance.

However, Official Notice is taken that displaying a metric using a scale and a needle is old and well known in the art (e.g. a speedometer needle). This provides an easy to use way to see how a metric is performing over a range of values.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the collective teachings of Deleryd, SAS and Davis to include the step of displaying the  $Z_{LT}$  metric using a needle indicator with a range of values, because it would provide an easy to use way to see a metric's performance.

Regarding Claim 21, Deleryd, SAS and Davis teach the limitations of measuring percentage of defects, as discussed above, however they do not teach defects as being measured

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in PPM (parts per million). However this measurement is known in the art of Six-sigma as providing a meaningful and easy to understand measure of quality.

It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the collective teachings of Deleryd, SAS and Davis, regarding measuring the percentage of defects, to measure the defects in PPM, because this is a well known and understood way to communicate defect rates.

Claims 20, 22, 24, 25 and 27 recite similar limitations to those addressed by the rejection of Claims 3, 7 and 9 above, and are therefore rejected under the same rationale.

6. Claims 8, 10, 16, 23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deleryd in view of SAS, in view of Davis, and further in view of Harry, Mikel J; "Six Sigma: A breakthrough strategy for profitability", May 1998, Quality Progress, 31, 5; ABI/INFORM Global, p.60, (hereinafter Harry).

Regarding Claim 8, Deleryd, SAS and Davis do not teach:

wherein the method further comprises determining Z short-term by use of the formula  $Z_{ST} = Z_{LT} + 1.5$ .

However, in the art of Six-Sigma it is old and well known to model a short term Z by shifting the long term Z by 1.5, as evidenced by Harry.

Harry teaches that a short term estimation of Z (i.e. defect ppm) may be performed by shifting the long term Z 1.5 sigma (see page 61 column 1 para 1 and Figure 2 – note in Figure 2 that the process capability chart illustrates where a shorter design width is more likely to produce defects, however depending on the particular process, a shift may occur where the other Z, that is

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associated with the LSL, results in a short term Z increase of 1.5 – here on the chart it is shown as  $Z_{st} = 6 + 1.5 = 7.5$  sigma.).

Harry teaches that this estimation method is based on research that shows that a typical process is likely to deviate by 1.5 standard deviations (page 60 column 2 para 3) at any given moment in time.

It would have therefore been obvious to one of ordinary skill in the art to further modify the collective teachings of Deleryd, SAS and Davis, to further include the teachings of Harry, regarding estimating deviations in variation in a process, because this estimation of a short term Z statistic are based on research of a typical process and this approach is a proven way to estimate short term variation to better predict process capability.

Regarding Claim 10, Deleryd, SAS, Davis and Harry do not teach wherein the method further comprises graphically displaying the  $Z_{st}$  value by displaying a range of values with an overlapping needle to indicate current performance. However, Official Notice is taken that displaying a metric using a scale and a needle is old and well known in the art (e.g. a speedometer needle). This provides an easy to use way to see how a metric is performing over a range of values. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the collective teachings of Deleryd, SAS and Davis to include the step of displaying the  $Z_{ST}$  metric using a needle indicator with a range of values, because it would provide an easy to use way to see a metric's performance.

Claims 16, 23 and 26 recite similar limitations as those recited in Claim 8 above, and are therefore rejected under the same rationale.

### Remarks

7. The applicant argued with respect to claim 1 on page 7 that the data cited in claim 1 (i.e. an order, a max ship date, a customer request date and a product category) is not nonfunctional descriptive material.

The examiner respectfully disagrees.

Storing data in a database where the data contains data labels, does not patentably distinguish over any other storing of data in a database, regardless of what the data labels are. The structure in a database is for storing data – there are field names that can be added to describe what the data is. Calling it “shipment data” or “accounting data” or “medical data” does not result in a patentable distinction between the labels of data that is stored – it is just data.

Additionally, Claim 1 as it is current cited, does not positively recite that the database actually stores the specific data as is argued, only that the fields *indicate* data is stored. Thus the claim actually recites that the fields in the database (i.e. the field names) provide for indicating that data having labels is stored, not even that different types of data *is* stored. This supports the examiner’s position that the data labels as cited are non-functional descriptive material.

The remaining claim limitations do not further show that the data that is stored is used in a functional way such that it requires that the data be of the type that is argued by the applicant. The limitation of subtracting two dates from each other and then adding a number is met by any other database application where two numbers are subtracted from each other and a third number is added. The result of the subtraction is a “difference value”. The fact that the applicant is describing the data as “dates” does not patentably distinguish over any other arithmetic operation

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where two numbers are subtracted and a third is added (where the third is predetermined). The positively cited structure in the claim is the above mentioned addition and subtraction. The cited references meet this limitation. Thus, the data labels the applicant is arguing do not further patentably distinguish the claim. (For example, had the examiner provided a reference where an accounting function retrieved two numbers from the database, e.g. revenue and expense, and subtracted revenue from expense and then added a predetermined number to the result – this would be patentably equivalent to what the applicant is claiming).

The argument that the cited references do not retrieve “valid” information from the database is without merit. To begin with, the applicant has not put forth a definition in the specification with the required clarity, deliberateness and precision as to what “valid” means. Additionally, there is not a positively recited step in the claim where “valid” data is distinguished from “invalid” data. As far as the examiner is concerned, if the numbers can be retrieved such that the functional, structural operation can be performed on them (i.e. subtracting two numbers and adding a predetermined third), then the data is valid. Thus the cited references teach retrieving “valid” data from the database.

The applicant’s further argued on page 9 that the subtraction of the customer requested date from the max ship date to produce a difference value supports the assertion by the examiner that the two data points labeled as two different dates is nonfunctional descriptive material, because the result of the operation is a value. The subtraction of any two values retrieved from a database also results in a difference value, thus this claim limitation is not differentiated by the data labels.

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The applicant further argued that the cited references do not teach that orders retrieved based on “max ship date”.

The examiner respectfully disagrees.

Databases are known to contain fields where queries according to criteria specified for one field are used to pull data from another field (e.g. querying all data where a field name pulls all records where the field name begins with letters A-D). The SAS quality data warehouse teachings pulling exactly this kind of data tied to common identifiers (see page 2 column 2 para 2). Here it is noted that different records can be pulled together to do an analysis based on a common identifier.

Additionally it is not even clear in the claim what a “max ship date” is. Is it the latest possible ship date? Is it the earliest ship date? Is it the date where the maximum number of customer orders can be shipped together? The applicant does not adequately specify in the specification a definition laid out with clarity, deliberateness and precision as to what a “max ship date” is.

The applicant argued on page 9 that the cited references fail to teach determining a statistical calculation to indicate process quality using the shipment quality metric.

The examiner respectfully disagrees.

The claim limitations do not positively recite what statistical calculation is performed (e.g. average, standard deviation). The structural and functional limitations in the claim are only that a statistical calculation is performed. The claim limitation “to indicate process quality using the shipment quality metric” is intended use and does not further patentably distinguish the claim. The claim does not recite how or what process quality is indicated – only that the



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shipment metric is used to indicate process quality. There is nothing in the subtraction of the two data values and the adding of the third that positively recite that the result has anything to do with "shipment quality", thus the label "shipment quality" is nonfunctional descriptive material.

The applicant attempted to challenge the examiner's taking of Official Notice on page 10. The applicant further supported this argument by stating that it is not obvious to add a predetermined number to a difference value.

The examiner respectfully disagrees.

The recent court decision of KSR precludes motivation. The teachings in the Official Notice taken that skewness is handled using an offset provide for a predictable result. The result is predictable because it is known that using a fixed value to offset skewness in a distribution produces the same amount of offset for every number in the distribution. Combining this with the other teachings cited does not change this result, because the other teachings (SAS) also are dealing with analysis of various statistical distributions. The combination with the other teachings, thus also provides for a predictable result. The cited references are all analogous art because they are all addressing the use of data to provide statistical analyses to improve processes. The recent KSR decision state "If a person of ordinary skill in the art can implement a predictable variation, and would see the benefit of doing so, 103 likely bars its patentability". In this case, a person of ordinary skill would recognize the benefit of eliminating skewness by using a positive offset (i.e. adding a number to all the data points in a distribution) and would see the benefit of doing so by having a distribution that is shifted to mitigate the effects of skewness on subsequent analysis, and thus would have an easier and more productive time analyzing the resulting offset distribution. The result is a predictable one and since using such a technique is

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within the ordinary skill of a person in the art of statistical analysis, the combination of the Official Notice is obvious under 35 USC 103.

### **Conclusion**

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

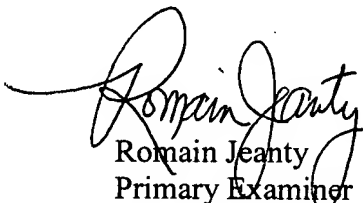
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Romain Jeanty whose telephone number is (571) 272-6732. The examiner can normally be reached on Mon-Thurs 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 29, 2007

  
Romain Jeanty  
Primary Examiner  
Art Unit 3623